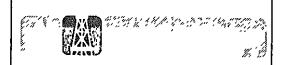
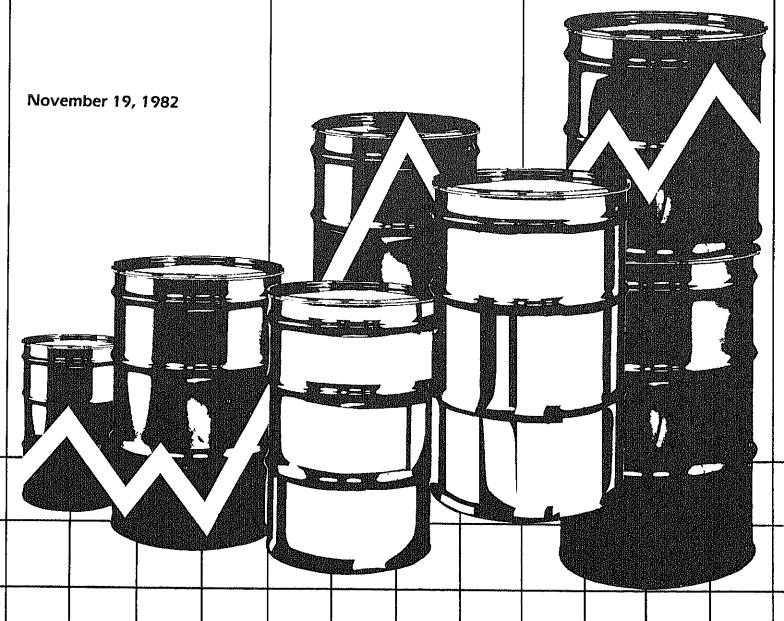
### Weekly Petroleum Status Report

Energy Information Administration **U.S. Department of Energy** 







The "Weekly Petroleum Status Report" is published each Friday by the Energy Information Administration. The data contained in this report are based on company submissions for the week ending 7 a.m. the preceding Friday.

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The Weekly Petroleum Status Report (WPSR) provides timely information on the petroleum supply situation. It presents current statistics in the context of historical information, selected prices, and forecasts. The WPSR is intended to provide up-to-date information to the industry, the press, planners, policy-makers, consumers, analysts, and State and local governments.

### Highlights

### **Refinery Operations**

Crude oil inputs to refineries averaged 11.7 million barrels a day for the week ending November 12, 1982. Refinery capacity utilization averaged 69.4 percent during the week. During the four weeks ending November 12, 1982, motor gasoline production averaged 6.2 million barrels a day, and distillate fuel oil production averaged 2.9 million barrels a day.

#### Stocks

On November 12, 1982, stocks of crude oil stood at 346.4 million barrels, which is about 5 percent below the level of one year ago. Stocks of motor gasoline, at 226.9 million barrels, were about 6 percent below the level a year ago. Distillate fuel oil stocks stood at 169.6 million barrels, which is about 16 percent below the level a year ago. Stocks of residual fuel oil stood at 62.9 million barrels, which is about 22 percent below the level a year ago.

### Imports

Net imports of crude oil (including imports for the Strategic Petroleum Reserve) and petroleum products together averaged 4.3 million barrels a day for the four weeks ending November 12, 1982, about 17 percent below their average a year ago. Gross imports of crude oil (excluding the Strategic Petroleum Reserve) averaged 3.5 million barrels a day for the four-week period ending November 12, 1982.

### **Products Supplied**

Total petroleum products supplied averaged 15.0 million barrels a day for the four-week period ending November 12, 1982, which is about 5 percent lower than during the comparable period last year. Motor gasoline was supplied at a rate of 6.4 million barrels a day, which is about 1 percent below the level supplied a year ago. Distillate fuel oil was supplied at a rate of 2.7 million barrels a day, which is about 5 percent below the rate one year ago.

#### Crude Oil Price

Indonesia announced last week official crude oil price reductions ranging from 47 cents to \$1.90 a barrel on its crude oils, effective November 11, 1982. The price of Minas, Indonesia's largest crude stream, was cut 47 cents to \$34.53 a barrel.

As a result of the change noted above, the weighted average international price of crude oil is estimated to be \$33.03 a barrel, effective November 11, 1982.

### **Spot Market Product Prices**

For the week ending November 12, 1982, the average spot market price of 98 octane gasoline on the Rotterdam market decreased \$1.58 to \$38.22 a barrel; the gasoil price increased 40 cents to \$40.28 a barrel, and the price of residual fuel oil decreased \$1.20 to \$28.75 a barrel. On the New York market, the average spot price of 89 octane regular gasoline increased 11 cents to \$38.56 a barrel; the price of No. 2 heating oil decreased \$1.05 to \$40.32 a barrel; and the residual fuel oil price decreased 50 cents to \$30.00 a barrel.

NOTE: Due to observance of Thanksgiving Day, the November 26 issue of the Weekly Petroleum Status Report will be published on Monday, November 29.

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U. S. Petroleum Balance Sheet
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Prices  World Crude Oil Prices
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Definitions

	Four-Week A		Percent	pally	lative Averages Days	Percent
		11/12/81		1982	1981	Change
Crude Oil Supply						·····
(1) Domestic Production <sup>1</sup>	E8,683	8,572	1.3	E8,665	8,569	1.1
(2) Net Imports (Including SPR) <sup>2</sup> (3) Gross Imports (Excluding SPR) (4) SPR Imports (5) Exports (6) SPR Stocks Withdrawn (+) or Added (-) (7) Other Stocks Withdrawn (+) or Added (-)	3,371	4,002	-15.8	3,211	4,214	-23.8
(3) Gross Imports (Excluding SPR)	3,488	3,867	-9.8	3,283	4,180	-21.5
(4) SPR Imports (5) Exports	188 E304	381 246	23.4	166 E238	263 229	4.0
(6) SPR Stocks Withdrawn (+) or Added (+)	-193	-408		-177	-349	
(6) SPR Stocks Withdrawn (+) or Added (-) (7) Other Stocks Withdrawn (+) or Added (-)	115	-184		54	49	
(8) Used Directly and Losses	E-59	-67		E-65	-62	
(9) Unaccounted-for Crude	-222	214		144	74	
(10) Crude Oil Input to Refineries	11,696	12,129	-3.6	11,833	12,496	-5.3
Other Supply	61 640	1 () 1	4.0	E1 623	1 (00	4.5
(11) NGL Production (12) Other Hydrocarbon Input	E1,543 E57	1,611 60	-4.2 -4.5	E1,537 E52	1,609	-4.5
(12) Other Hydrocarbon Input (13) Crude Used Directly as Product	£57 57	63	-4.5	£52 61	51 58	1.9
14) Processing Gain	556	523	6.2	528	499	5.9
15) Not Droduct Importe	909	1,148	-20.8	929	1,229	-24.5
16) Gross Product Imports	1,463	1,625	-10.0	1,486	1,583	-6.1
1/) Product Exports	E554	477	16.1	E558	353	57.8
18) . Product Stocks Withdrawn (+) or Added (-) <sup>5</sup>	201	199		292	92	
19) Total Product Supplied for Domestic Use	15,018	15,732	-4.5	15,231	16,033	-5.0
Products Supplied						
20) Motor Gasoline	6,426	6,497	-1.1	6,540	6,591	-0.8
21) Naphtha-type Jet Fuel 22) Kerosene-type Jet Fuel	178 817	182	-1.8	208	200	3.8
23) Kerosene	178	770 141	6.2 25.6	798 126	812 118	-1.7 6.4
24) Distillate Fuel Oil	2,686	2,833	-5.2	2,701	2,788	-3.1
25) Residual Fuel Oil	1,332	1,894	-29.7	1,690	2,083	-18.8
26) Other Dils	3,401	3,414	-0.4	3,168	3,441	-7.9
27) Total Products Supplied	15,018	15,732	-4.5	15,231	16,033	-5.0
etroleum Stocks					Percent Cha	inge from
Millions of Barrels)	11/12/82	1	1/05/82	11/12/81	Previous Week	Year Ago
Crude Oil (Excluding SPR) <sup>6</sup>	346.4		R354.2	364.7	-2.2	-5.0
Motor Gasoline	226.9		R227.5	240.6	-0.3	-5.0 -5.7
Naphtha-type Jet Fuel	5.6		5.7	6.6	-0.6	-15.3
Kerosene-type Jet Fuel	35.0		35.0	35.8	0.1	-2.0
Kerosene	11.2		11.0	12.5	2.0	-10.4
Distillate Fuel Oil Residual Fuel Oil	169.6		167.8	200.8	1.1	-15.5
Unfinished_Oils	62.9 114.0		61.9 R112.4	80.5 118.4	1.7 1.4	-21.8 -3.7
Other Oils <sup>8</sup>	E172.5		E173.1	213.4	-0.4	-19.1
Total Stocks (Excluding SPR)	1,144.3	R	1,148.5	1,273.3	-0.4	-10.1
Crude Oil in SPR	286.2		284.9	217.6	0.5	31.5
Total Stocks (Including SPR)	1,430.5	_	1,433.5	1,490.9	-0.2	-4.1

R=£IA revision.

E=Estimate based on monthly data. I Includes lease condensate.

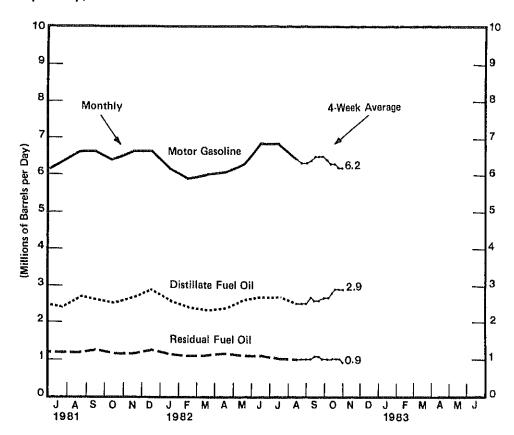
<sup>1</sup> Includes lease condensate.
2 Net Imports = Gross Imports (line 3) + SPR Imports (line 4) - Exports (line 5).
3 The December 1980 crude oil stocks level used in the calculation of the 1981 "Other Stocks Withdrawn or Added" is the 1981-basis crude oil stock level published in the 1981 "Petroleum Supply Annual" (380.2 million barrels). The difference between the 1980- and the 1981-basis crude oil stock levels is the inclusion of crude oil in transit from Alaska in the figures for January 1981 forward. The December 1980 crude oil stock level shown on page 6 is the 1980-basis figure published in the 1980 "Petroleum Statement, Annual" and is consistent with other 1980 figures shown.
4 Includes unfinished oils and natural gas plant liquids for processing.
5 Includes an estimate of minor product stock change based on monthly data.
6 Includes crude oil in transit to refineries.
7 Includes stocks of finished motor gasoline and stocks of motor gasoline blending components.
8 Included are stocks of all other oils such as aviation gasoline, natural gas liquids (including ethane), petrochemical feedstocks, special naphthas, lube oils, wax, coke, asphalt, road oil, and miscellaneous

petrochemical feedstocks, special naphthas, lube oils, wax, coke, asphalt, road oil, and miscellaneous oils. For the current two weeks, stocks of these minor products are estimated from monthly data. Sources:

 <sup>1980:</sup> EIA, "Petroleum Statement. Annual (Final Summary)."
 1981: EIA, "Petroleum Supply Annual."
 January-August 1982: EIA, "Petroleum Supply Monthly."
 September 3, 1982-Current Week: Estimates based on EIA weekly data.

Note: Due to independent rounding, individual product detail may not add to total. The percentages shown are calculated using unrounded numbers.

U.S. Refinery Production by Product (Millions of Barrels per Day)



Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980												
Motor Gasoline	7.0	6.9	6.5	6.3	6.3	6.6	6.4	6.4	6.4	6.1	6.5	6.6
Jet Fuel	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1,0	1.0	1.0
Kerosene	0.2	0.2	0.2	0.1	0.1	. 0.1	0.1	0.1	0.1	0.1	0.1	0.2
Distillate Fuel	3.0	2.8	2.6	2.5	2.5	2.6	2.7	2.5	2.7	2.6	2.7	2.9
Residual Fuel	1.8	1.8	1.6	1.6	1.5	1.6	1.5	1.4	1.5	1.5	1.6	1.7
1981 <sup>1</sup>												
Motor Gasoline <sup>2</sup>	6.7	6,3	6.2	6.1	6,1	6.2	6.4	6.6	6,6	6.4	6,6	6,6
Jet Fuel	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	1.0	0.9
Kerosene	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Distillate Fuel <sup>2</sup>	3.0	2.8	2.5	2.4	2.5	2.5	2.4	2.7	2.6	2.5	2.7	2.9
Residual Fuel <sup>2</sup>	1.6	1.6	1.4	1,3	1,2	1.2	1.2	1.2	1.3	1.2	1.2	1.3
1982 <sup>1</sup>												
Motor Gasoline <sup>2</sup>	6.2	5.9	6.0	6.1	6.3	6.8	6,8	6.4				
Jet Fuel	0.9	1.0	1.1	1.0	0,9	0.9	1.0	1.0				
Karasana	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1				
Distillate Fuel <sup>2</sup>	2.6	2.4	2.3	2.4	2.6	2.7	2.7	2.5				
Residual Fuel <sup>2</sup>	1.2	1.1	1.1	1.2	1.1	1.1	1.0	1.0				
Average for Four-	Maak De	ariod End	ina									
1982 <sup>1</sup>	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	
Motor Gasoline <sup>2</sup>	6.3	6,3	6.4	6.5	6.5	6.5	6.4	6.3	6.3	6.2	6,2	
Jet Fuel	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Karasana	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0,2	0.2	0.2	
Distillate Fuel <sup>2</sup>	2.5	2.5	2,7	2.6	2,6	2.7	2.7	2.8	2.9	2.9	2.9	
Residual Fuel <sup>2</sup>	1.0	1.0	1.0	1.1	1.1	1.0	1.0	1.0	1.0	1.0	0.9	
Trainent Free	110	1,0	1.0	,	,	1,0	1.0	,,,,			0.0	

<sup>1</sup> Production statistics represent net production (i.e., refinery output minus refinery input).
2 Production statistics for 1981 and 1982 should not be directly compared with those for prior years because, in January 1981, EIA modified its definitions for motor gasoline, distillate fuel oil, and residual fuel oil. See Appendix D for further explanation.

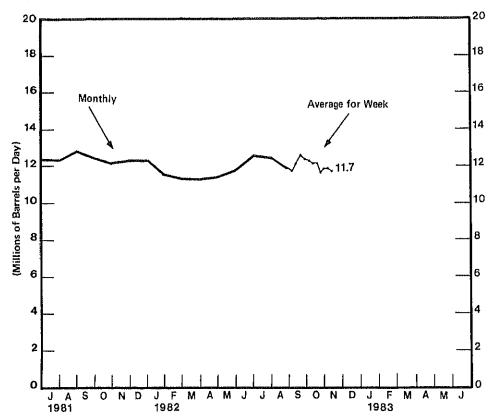
Source: • 1980: EIA, "Petroleum Statement, Annual (Final Summary)."

• 1981: EIA, "Petroleum Supply Annual."

• January—August 1982: EIA, "Petroleum Supply Monthly."

• September 3, 1982—Current Week: Four-week averages based on EIA weekly data.

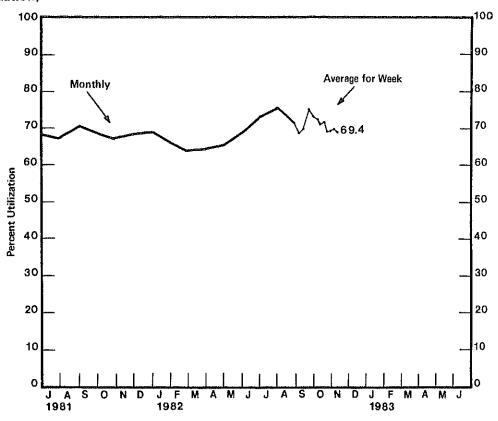
### Crude Oil Inputs to Refineries (Millions of Barrels per Day)



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980	14.3	14.2	13.7	13.5	13.3	13.7	13.3	13,0	13.3	12.8	13.1	13.6
1981	13,2	12.9	12.4	12.1	12.3	12.4	12.3	12.9	12.5	12.1	12.3	12.3
1982	11.6	11,3	11.3	11,4	11.8	12.5	12.4	11.9				
Average fo 1982	r Week En 9/3	ding: 9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	
	11.8	12.1	12.6	12,4	12.3	12.1	12.1	11.6	11.8	11,8	11.7	

Source. • 1980: EtA, "Potroleum Statement, Annual (Final Summary)."
• 1981: EtA, "Petroleum Supply Annual"
• Jenuary—August 1982: EtA, "Petroleum Supply Monthly."
• September 3, 1982—Current Week. Estimates based on EtA weekly data.

### Refinery Capacity Utilization (Percent Utilization)



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980	82.1	79.9	76.8	75.7	74.8	77.0	74.5	72.7	73.6	70.6	73.0	75.5
1981	72.5	70.8	67.7	65.7	67.2	68.1	67.4	70.6	68.4	67.0	68.2	69.2
1982	66.3	64.6	64.9	65.5	68.0	73.6	75.2	71.6				
Average for 1982	or Week Er 9/3	ıding: 9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	
	68.7	70.0	75.2	73.5	72.8	71.8	72.1	69.5	69.9	70.0	69.4	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

Source: • 1980: EIA, "Petroleum Statement, Annual (Final Summary)."
• 1981: EIA, "Petroleum Supply Annual."
• January—August 1982: EIA, "Petroleum Supply Monthly."
• September 3, 1982—Current Week: Estimates based on EIA weekly data

### Stocks of Crude Oil and Petroleum Products, U.S. Totals (Millions of Barrels)

Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980								··-				
Crude Oil 2.3	357.5	366 0	367.4	379.8	383 4	381 5	378 7	387 2	376 4	378 5	373 1	358.2
Motor Gasoline	262.1	274 4	282,7	2718	263.1	264 8	260 7	259 0	258.1	246 4	257.2	261 3
Jet Fuel	38.4	38 3	38 7	39 3	41.3	423	40.9	40.3	42.2	43 1	43 9	42.0
Kerosene Distillate Fuel Oil	14.0	13.3	13,1	13.4	138	139	14.3	133	129	12 5	127	11.6
Residual Fuel Oil	212 4 97 2	191 6 91 0	177 8 88 3	177.2	183 4	1965	2138	226 3	232 4	225.7	222 4	205 1
Unfinished Oils	1124	1113	1159	85,3 123 5	87.7	87 8	85 6	86,9	87.9	91.0	93.2	91 8
Other Oils	165.9	166.3	172 7	185 6	130.6 192.4	133.1 199.8	131 6 208 5	129.6	132.1	131.1 204.8	126.3	123,9
Total Stocks (Excl. SPR)	1,260 0	1,252 1	1,256 7	1,275 9	1,295.6	1,319.7	1,334 2	214.7 1,357.4	212.4 1,354 3	1,333 0	201.4 1,330.1	190 5 1,284,4
Crude Oil in SPR	91 2	91.2	91 2	91 2	91.2	91 2	91.2	91,2	92.8	96.6	102.3	107.8
Total Stocks (Incl. SPR)	1,351 2	1,343 3	1,347 8	1,357 1	1,3868	1,410.9	1,425,4	1,448.6	1,447.2	1,429.7	1,432.4	1,392.2
1981												
Crude Oil <sup>2</sup>	374 0	378 2	393 0	397 5	393,7	384.7	385.9	262.0	250.0	364 0	200.0	262 5
Motor Gasoline4	276.1	284,0	285 O	272.1	258.3	364.7 241.6	აგი, <del>ა</del> 227 7	362,0 233,3	356.0 237.1	236 1	366.0 248 4	363.5 253.0
Jet Fuel	39 5	38 6	39 0	40 4	44 5	44 9	44 8	233.3 44.7	43.1	427	42 0	203.0 41.1
Kerosene	10 5	10,6	11.2	120	12.8	13.4	13 3	13.8	13.9	12 7	123	11.0
Distillate Fuel	1794	172.5	164,3	164 6	171.8	179,9	186,3	200,2	207 3	201.2	200 1	191 5
Residual Fuel	82.1	77 9	74.8	72.9	78 1	69.4	69.3	74.9	80,2	79.9	81.4	78.0
Unfinished Oils	121 5	122 3	126 2	126 5	126 3	126,1	126 1	124 5	118.4	1195	1164	111.3
Other Oils Total Stocks (Excl. SPR)	1922	188 5	186,9	194,5	202.7	207.1	212.1	219.0	220.7	214.0	212.3	203 9
Crude Oil in SPR	1,275 3 112 5	1,272.5 116,1	1,280,3 120 9	1,280 5	1,288.3	1,267.1	1,265 4	1,272.5	1,276 7	1,270 0	1,278.9	1,253.3
Total Stocks (Incl. SPR)	1,387.8	1,388.5	1,401,2	134.2 1,414.6	150,1 1,438,3	163,1 1,430 2	173,1 1,438 5	184.7 1,457.2	199.2 1,476.0	214 8 1,484.8	222.5 1,501.5	230 3 1,483.6
						-	,	•		,,	,,	*********
1982												
Crude Oll 2	370.9	371 0	365 7	355 5	348 5	342.8	344.6	351 8				
Motor Gasoline <sup>4</sup>	262 1	262 1	247.9	2228	214 9	2197	226 0	226.0				
Jet Fuel Kerosene	37.2	37 0	42 5	44 1	418	40.1	398	40.8				
Distillate Fuel	96 1660	9.1 146 7	8.8 127.7	96 1088	89	9 2	9,1	9.5				
Residual Fuel Oil	68.2	58 1	57.3	536	114 5 59.1	124.5	148.1	158.9				
Unfinished Oils	116.7	1169	115 B	1189	117.9	60.5 117.5	59 O 117 B	52 8 116 0				
Other Oils	195.0	189 3	186.6	180.9	182,8	183.7	182.4	178.1				
Total Stocks (Excl. SPR)	1,225 6	1,190,2	1,152 4	1,094.3	1,088 4	1,098.1	1,126 8	1,133.8				
Crude Oil in SPR	236 3	241.2	248,5	255 5	261 0	264.1	267.2	273.6				
Total Stocks (Incl. SPR)	1,460 9	1,431 4	1,400 9	1,349 9	1,349,4	1,362,3	1,393.9	1,407.4				
Week Ending:												
1982	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	
Crude Oll 2	355 4	359 6	353,5	357 5	357.4	357.9	349.6	357.0	355 7	R354.2	346.4	
Motor Gasoline <sup>4</sup>	223 6	225.1	225,5	2288	230,6	231,2	229 0	228.5	228.7	R227.5	226 9	
Jet Fuel	39.9	39 4	39.7	40.1	39 7	37 8	38.9	40.1	39.9	40.7	40.6	
Kerosene	10.1	10,1	10,0	10 2	10.2	107	107	105	105	11.0	11,2	
Distiliate Fuel Oil	156.2	159,2	158.0	1687	154.5	158.2	161.6	162.9	163 6	167.8	169 6	
Residual Fuel Oil Unfinished Oils	51.5	54,0	55.8	578	608	60.4	60 9	61.7	61 7	61.9	62.9	
Other Oils <sup>5</sup>	118 7 E195.0	119.0 E195.3	118,3	1177	1188	119.0	117.6	115 2	113.3	R112.4	114.0	
Total Stocks (Excl. SPR)	1,150.5	1,161,6	£195.5 1,156.3	E187.1 1,158 0	E187.4 1,159.3	E186.1	E184.8	E175 4	£174.1	E173.1	E172.6	
Crude Oil in SPR	273.9	274.7	275.5	2768	277.B	278.7	1,153.1 280.8	1,151.3 283.4	1,147.6	R1,148 5	1,144.3	
Total Stocks (Incl. SPR)	1,424.3	1,436 3	1,431 8	1,434.8	1,437.0	1,440.0	1,433.9	1,434 7	284.3 1,431.8	284.9 R1,433.5	286.2 1.430.5	
		,		-1	.,	.,	יים טידיי	1,404 /	1,401.0	n 1,433.0	1,440.0	

R=EIA revision.

E=Estimated. See definition of "Stock Change (Refined Products)" for explanation.

1 Product stocks include those stocks held at refineries, in pipelines, and at major bulk terminals. Stocks held at natural gas processing plants are included in "Other Olls" and in totals. All stock levels are as of the end of the period.

2 Crude oil stocks include those stocks held at refineries, in pipelines, lease tanks, and in transit to refineries, and do not include those held in the Strategic Petroleum Reserve.

3 The December 1980 crude oil stock level shown here is from the 1980 "Petroleum Statement, Annual" and is not the same as the 1981—basis crude oil stock level used in the calculations for the U.S. Petroleum Balance Sheet (see footnote 3, page 1).

4 Motor gasoline stocks are the sum of stocks of finished motor gasoline and stocks of motor gasoline blending components, shown in the "Petroleum Supply Annual" and the "Petroleum Supply Monthly." The 1982 weekly motor gasoline stocks are comperciated using monthly statistics.

5 Weekly totals for stocks of other oils, which include aviation gasoline, ethane, petrochemical feedstocks, special nephthas, tube oil, wax, coke, asphalt, road oil, and miscellaneous oils are astimated using monthly data.

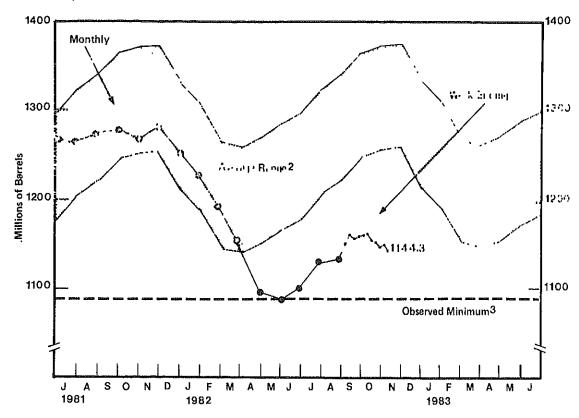
Source a 1980, EIA, "Patroleum Supply Annual."

• January—August 1982. EIA, "Petroleum Supply Monthly,"

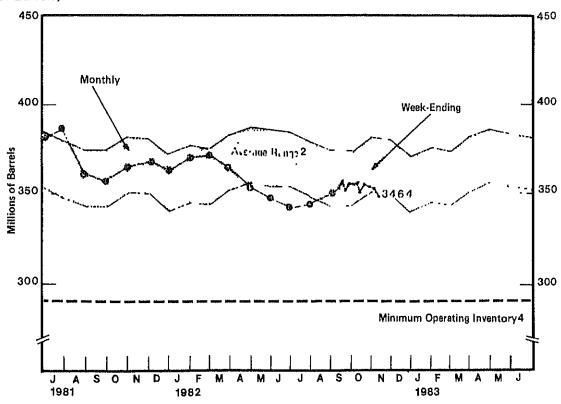
• January—August 1982. EIA, "Petroleum Supply Monthly,"

• September 3, 1982—Current Week: Estimates based on EIA weekly data.

### Stocks of Crude Oil<sup>1</sup>and Petroleum Products, U.S. Total (Millions of Barrels)



Stocks of Crude Oil, U.S. Total (Millions of Barrels)



<sup>1</sup> Excludes stocks held in the Strategic Petroleum Reserve and includes crude oil in transit to refineries.
2 Average level, width of average range, and observed minimum are based on three years of monthly date: July 1879—June 1982. The seasonal pattern is based on seven years of monthly date: July 1879—June 1982. The seasonal pattern is based on seven years of monthly date: January 1975—December 1981. See Appendix B for further explanation.
3 The observed minimum for total stocks in the last three-year period, July 1979—June 1982, was 1088,4 million barrels. It occurred in May 1982. See Appendix B for further

<sup>3</sup> The observed minimum for total stocks in the lest time-year points, and sexplanation.

4 The National Petroleum Council defines the Minimum Operating inventory as the minimum level required for routine operation. In their 1979 study, they defined this inventory level for crude oil to be 290 million barrels. See Appendix B for further explanation.

Source: • Ranges and Seasonal Patterns: 1975—1980, EIA, "Petroleum Statement, Annual (Final Summary)," 1981, EIA, "Petroleum Supply Annual."

• Monthly data: 1981, EIA, "Petroleum Supply Annual," January—August 1982, EIA, "Petroleum Supply Monthly."

• September 3, 1982—Current Week: Estimates based on EIA weekly data,

### Stocks of Motor Gasoline by District <sup>1</sup> (Millions of Barrels)

Year/District	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980	,		•		······							
East Coast (PAD 1)	70.2	75.0	73.7	74.8	75.2	76.4	72.9	72.8	75.7	69,9	69.2	71.1
Midwest (PAD 2)	83.1	85.0	89.0	83.3	76.9	79.1	78.9	76.8	77.5	70.9	72.8	76,9
Gulf Coast (PAD 3)	69.8	73.7	80.9	75.7	74,3	73.2	73.2	71.4	68.3	69.8	75.8	73,8
Rocky Mountain (PAD 4)	8.8	9.3	9.7	9.4	8.9	8.4	6.6	6,5	6.2	6.6	7.8	8.6
West Coast (PAD 5)	30.3	31.4	29.4	28.6	27.8	27.9	29.1	30.2	30.5	29.2	31.6	31,0
Total U.S. <sup>2</sup>	262.1	274.4	282.7	271.8	263.1	264.8	260.7	259.0	258.1	246.4	257.2	261.3
1981												
East Coast (PAD 1)	71.7	74.2	79.5	77.9	73.1	69.5	62.7	64.3	69.6	69.6	69.7	69.5
Midwest (PAD 2)	86.0	90.4	89.7	84.2	80.1	72.4	65.9	66.7	65.3	66.0	69.2	72.6
Gulf Coast (PAD 3)	77.2	79.6	78.5	76.2	72.2	65.9	64.0	68:6	68.5	65.0	70.6	69,5
Rocky Mountain (PAD 4)	9.7	10.3	10.2	9.4	8.6	7.4	6.5	6.0	5.8	6,3	7.7	8.5
West Coast (PAD 5)	31.5	29.5	26.9	24.4	24,3	26.3	28.6	27.8	27.9	29.2	31.2	32.9
Total U.S?	276.1	284.0	285.0	272.1	258.3	241.6	227.7	233,3	237.1	236.1	248.4	253.0
1982												
East Coast (PAD 1)	71.7	69.6	67.1	61.7	63.6	66.0	63.1	62.4				
Midwest (PAD 2)	78.6	79.1	74.8	63.2	56.8	56.6	62,6	65.8				
Gulf Coast (PAD 3)	70.2	69.2	68.0	63.4	63.6	65.0	66.0	64.4				
Rocky Mountain (PAD 4)	9.6	9.9	10.1	8.9	7,7	6.5	5.8	5.5				
West Coast (PAD 5)	32.0	34.3	27.8	25.5	23.3	25.7	28.4	27.7				
Total U.S. <sup>2</sup>	262.1	262.1	247.9	222.8	214.9	219.7	226.0	226.0				
Week Ending:												
1982	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	
East Coast (PAD 1)	62.7	62.6	62.9	62.4	63,1	62.1	62.0	62.6	62.6	R62.8	63.4	
Midwest (PAD 2)	67.1	67.6	68.1	69.5	70.0	70.7	70.7	70.3	68.3	67.0	65.5	
Gulf Coast (PAD 3)	62.1	63.2	63.2	66.1	66.0	66.9	64.5	64.1	65.7	66.1	65.9	
Rocky Mountain (PAD 4)	5.0	5.2	5.5	5,1	5,5	5.7	5.8	5.8	5.9	6.0	6.2	
West Coast (PAD 5)	26.6	26.4	25.9	25.6	25.9	25.8	26.0	25.7	26.2	25.6	25.9	
Total U.S. <sup>2</sup>	223.6	225.1	225.5	228.8	230.6	231,2	229.0	228.5	228.7	R 227.5	226.9	

R=EIA revision.

1 Districts are Potroleum Administration for Defense (PAD) Districts
2 PAD district date may not add to total due to independent rounding
Source: • 1980 Totals: EIA, "Petroleum Statement, Annual (Final Summary)."

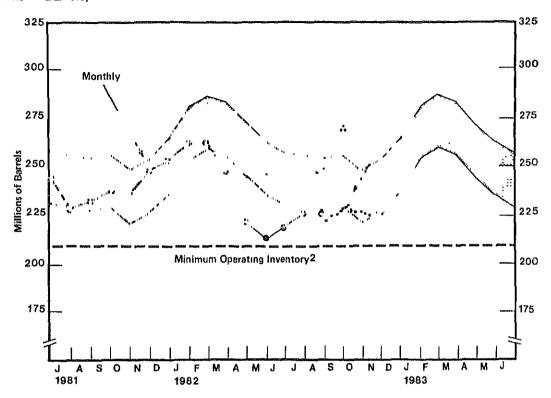
• 1980 Regional Data. Unpublished data based on "Petroleum Statement, Annual (Final Summary),"

• 1981: EIA, "Petroleum Supply Annual."

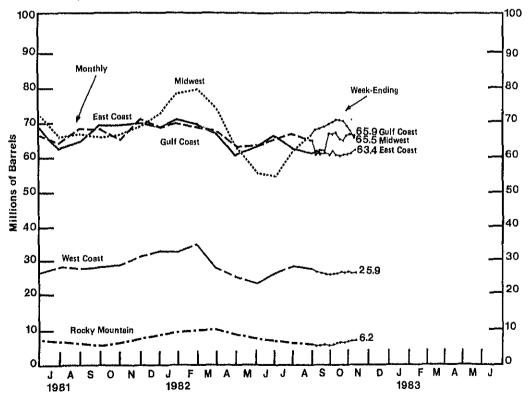
• January-August 1982: EIA, "Petroleum Supply Monthly."

• Septamber 3, 1982--Current Week. Estimates based on EIA weekly data.

Nota Motor gasoline stocks are the sum of finished motor gasoline and stocks of motor gasoline blending components.



### Stocks of Motor Gasoline by District (Millions of Barrels)



<sup>1</sup> Average level and width of average range are based on three years of monthly date. July 1979—June 1982. The seasonal pattern is based on six years of monthly data.

January 1975—December 1976 and January 1978—December 1981. See Appendix B for further explanation.

2 The National Petroleum Council defines the Minimum Operating Inventory as the minimum level required for routine operation. In their 1979 study, they defined this inventory level for motor pesoline to be 210 million barrels. See Appendix B for further explanation.

8ource: • Ranges and Seasonal Patterns 1975—1980, EIA, "Petroleum Statement, Annual (Final Summary)," 1981, EIA, "Petroleum Supply Annual, January—August 1982, EIA, "Petroleum Supply Monthly."

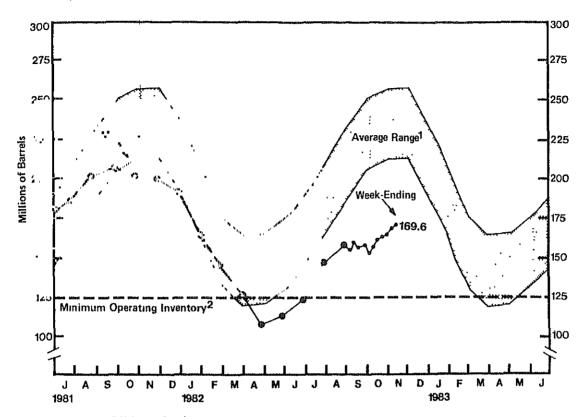
• September 3, 1982—Current Week: Estimates based on EIA weekly data.

Note: Motor gesoline stocks are the sum of stocks of finished motor gesoline and stocks of motor gesoline blending components

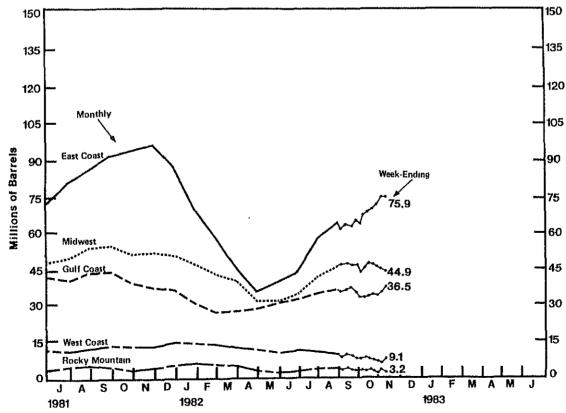
# Stocks of Distillate Fuel Oil by District<sup>1</sup> (Millions of Barrels)

Year/District	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
											4-0-0	
1980 East Coast (PAD 1)	92.1	77.9	67.1	71.4	78.0	85.8	96,0	104.1	108.2	106,5	103.3	90.3
Midwest (PAD 2)	65.5	61.1	57.3	55.7	54.3	56.8	60,2	62.4	62.6	57.4	58.2	58,5
Gulf Coast (PAD 3)	38.7	36.1	36.8	33.5	34.7	38.4	41.2	42.9	45.5	46.1	44.2	39,8
Rocky Mountain (PAD 4)	3.5	3.7	3.9	3.9	3.8	3.5	3,9	3.9	3.6	3,3	3.3	3.4
West Coast (PAD 5)	12.6	12.8	12.8	12.8	12.6	12.1	12.6	13,0	12.4	12.3	13.4	13.1
West Goast (FAD 5)	12.0	12.0	12.0	,,,,	•			_		Dor "	DOD 4	005.4
Total U.S. <sup>2</sup>	212.4	191.6	177.8	177.2	183.4	196.5	213.8	226.3	232.4	225.7	222.4	205.1
1981						, -		00.0	00.0	94.8	96.0	07.4
East Coast (PAD 1)	71.9	69.8	64.7	64.4	68.2	73.8	81.3	86.3	92.0	51.0	51.6	87.4 50.0
Midwest (PAD 2)	57.7	56 1	52.5	52.4	50.5	48.7	49.8	54.1	54.3		36.7	35,5
Gulf Coast (PAD 3)	34.0	32.3	32.4	34.7	39.2	42.9	40.7	44.5	44.8	39.8 3.3	3.6	3,9
Rocky Mountain (PAD 4)	3.4	3.3	3.3	2.9	3.2	3.4	3,7	3.8	3.6		12.3	14.7
West Coast (PAD 5)	12.4	11.1	11.4	10.3	10.7	11,1	10.8	11.4	12.5	12.3	12.5	14,7
Total U.S. <sup>2</sup>	179.4	172.5	164.3	164.6	171.8	179.9	186.3	200.2	207.3	201.2	200.1	191,5
1982												
East Coast (PAD 1)	69.2	58,4	44.9	35.1	39 2	44.2	57.4	63,9				
Midwest (PAD 2)	47.4	43.8	40.2	31.2	31.2	34.1	42,6	45,5				
Gulf Coast (PAD 3)	30.8	26.7	27 5	28.2	31.0	32,5	34.2	35.8				
Rocky Mountain (PAD 4)	4.1	3.9	3.7	3.1	2.8	3,0	3.4	3.5				
West Coast (PAD 5)	14.5	13.9	11.4	11.1	10.3	10,7	10,6	10.2				
Total U.S. <sup>2</sup>	166.0	146.7	127.7	108.8	114.5	124,5	148.1	158.9				
Week Ending:									40 (00	44 /5	44/40	
1982	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	
East Coast (PAD 1)	61.8	63,6	62.9	64.8	63.7	67,0	68.6	69,6	71.7	75.9	75,9	
Midwest (PAD 2)	46.3	46.5	45.6	46.2	44.6	45,1	46.4	46.3	45.5	45.1	44,9	
Gulf Coast (PAD 3)	35.3	35.4	36.3	35.0	33.4	33,4	34.1	34.9	34.5	35.0	36.5	
Rocky Mountain (PAD 4)	3.4	3.5	3,4	3.4	3.4	3,3	3.4	3.3	3.2	3.4	3,2	
West Coast (PAD 5)	9.4	10.2	9.8	9.3	9.3	9.4	9.1	8.8	8.7	8.5	9,1	
Total U.S. <sup>2</sup>	156.2	159.2	158.0	158.7	154.5	158,2	161.6	162.9	163,6	167.8	169,6	

<sup>1</sup> Districts are Petroleum Administration for Defense (PAD) Districts.
2 PAD district data may not add to total due to independent rounding
Source: • 1980 Totals: EIA, "Petroleum Statement, Annual (Final Summary) "
• 1980 Regional Data: Unpublished data based on "Petroleum Statement, Annual (Final Summary) "
• 1981: EIA, "Petroleum Supply Annual."
• January—August 1982, EIA, "Petroleum Supply Monthly"
• September 3, 1982—Current Week. Estimates based on EIA weekly data



Stocks of Distillate Fuel Oil by District (Millions of Barrels)



<sup>1</sup> Average level and width of everage range are based on three years of monthly data:

January 1975—December 1981. See Appendix B for further explanation.

2 The National Petroleum Council defines the Minimum Operating Inventory as the minimum level required for routine operation. In their 1979 study, they defined this inventory level for distillate fuel oil to be 125 million berrels. See Appendix B for further explanation.

Source: 

Ranges and Seesonal Patterns 1975—1980, EIA, "Petroleum Statement, Annual (Final Summary)," 1981, EIA, "Patroleum Supply Annual,"

Monthly Data: 1981, EIA, "Petroleum Supply Annual, January—August 1982, EIA, "Petroleum Supply Monthly."

September 3, 1982—Current Week: Estimates based on EIA weekly data.

# Stocks of Residual Fuel Oil by District<sup>1</sup> (Millions of Barrels)

Year/District	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980	·	<u></u>										
East Coast (PAD 1)	49.0	42.6	43.0	43.8	43.4	45.1	44.0	43.6	43.8	45.9	46.5	45.4
Midwest (PAD 2)	12.7	12.5	12.0	10.7	10.8	10.9	9.8	9,3	8.9	9.0	8.6	9.1
Gulf Coast (PAD 3)	22.1	22.7	19.5	17.3	20.1	18.9	19.4	21.0	22.3	23.0	25.2	23.8
Rocky Mountain (PAD 4)	1.0	1.0	0.9	0.9	0.8	8.0	0.9	0.9	0.9	0.8	0.9	8.0
West Coast (PAD 5)	12.4	12.1	12.8	12.5	12.6	12.0	11.6	12.0	12.0	12.3	12.1	12.6
Total U.S. <sup>2</sup>	97.2	91.0	88.3	85.3	87.7	87.8	85.6	86.9	87.9	91.0	93.2	91.8
1981												
East Coast (PAD 1)	39.0	38.5	37.3	36.3	38.2	33.6	33.0	34,4	40.0	40.4	43.0	40.1
Mirlwest (PAD 2)	9.2	9.0	7.9	7.3	7.1	7.0	7.7	8.1	8.5	8.0	8.2	8.3
Gulf Coast (PAD 3)	21.8	19.7	19.4	19.1	21.7	17.0	17.4	21.2	20.4	20.4	19.7	18.7
Rocky Mountain (PAD 4)	0.8	0.7	0.6	0.5	0.6	0.6	0.5	0.6	0.7	0.7	0.7	0.7
West Coast (PAD 5)	11.4	10.1	9.7	9.7	10,5	11,2	10.7	10.7	10.7	10.4	9.8	10.2
Total U.S. <sup>2</sup>	82.1	77.9	74.8	72.9	78.1	69.4	69.3	74.9	80.2	79.9	81.4	78.0
1982												
East Coast (PAD 1)	32.2	24.9	24,8	23.5	28.3	28.2	27.1	23.1				
Midwest (PAD 2)	7.7	7.3	7.0	6.2	6.0	5.7	5.7	5.3				
Gulf Coast (PAD 3)	17.4	14.4	14.7	13,5	14.9	17.1	16.4	15.6				
Rocky Mountain (PAD 4)	0.6	0.7	0.6	0.5	0.5	0.5	0.5	0.4				
West Coast (PAD 5)	10.2	11.0	10,3	9.9	9.4	9.2	9.3	8.4				
Total U.S. <sup>2</sup>	68.2	58.1	57,3	53.6	59.1	60.5	59.0	52.8				
Made Cadlan.												
Week Ending: 1982	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	
East Coast (PAD 1)	23.5	24.3	26,1	26.8	29.5	28.9	29.0	30.7	32.1	32.5	22.0	····
Midwest (PAD 2)	5.3	5.4	5.2	5.4	5.6	20.9 5,1	5.1	4.9	4.8	32.5 4.6	33.9	
Gulf Coast (PAD 3)	14.5	15.9	16.0	16.3	15.7	16.5	17.1	16.1	14.9	4.6 15.8	4.7	
Rocky Mountain (PAD 4)	0.5	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.6	9.0	16.0	
West Coast (PAD 5)	7.8	8.0	8.0	8.8	9.5	9,2	9.2	9.3	9.3	8.4	0.6 7.7	
Total U.S. <sup>2</sup>	51.5	54.0	55,8	57.8	60.8	60.4	60.9	61.7	61.7	61.9	62.9	
						~~,,		0747	01.7	01.9	02.8	

<sup>1</sup> Districts are Petroleum Administration for Defense (PAD) Districts
2 PAD district data may not add to total due to Independent rounding
Source:

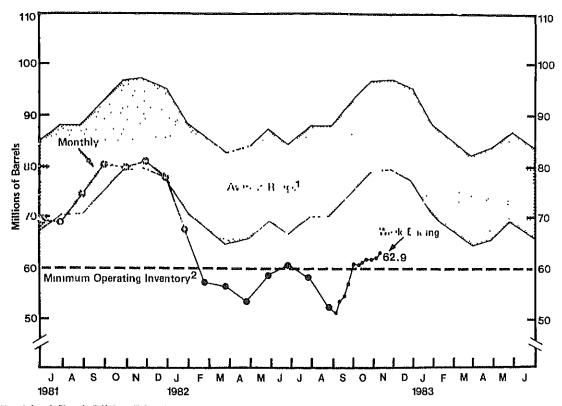
• 1980 Totals: EIA, "Petroleum Statement, Annual (Final Summary),"

• 1980 Regional Date: Unpublished data based on "Petroleum Statement, Annual (Final Summary),"

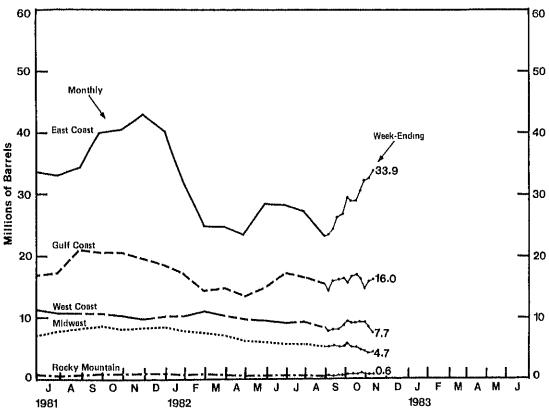
• 1981: EIA, "Petroleum Supply Annual."

• January—August 1982. EIA, "Petroleum Supply Monthly"

• September 3, 1982—Current Week: Estimates based on EIA weekly data



Stocks of Residual Fuel Oil by District (Millions of Barrels)



<sup>1</sup> Average level and width of average range are based on three years of monthly data: July 1979-June 1982. The seasonal pattern is based on seven years of monthly data:

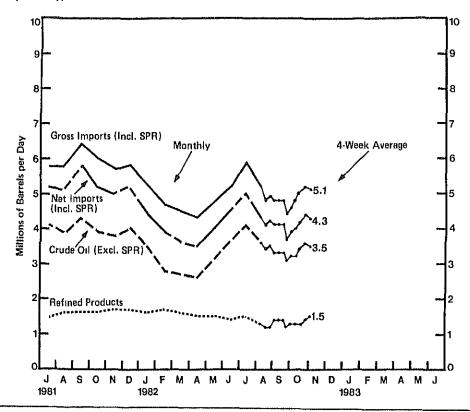
January 1975—December 1981. See Appendix B for further explanation.

2 The National Petroleum Council defines the Minimum Operating Inventory as the minimum level required for routine operation. In their 1979 study, they defined this inventory level for residual fuel oil to be 60 million barrels, See Appendix B for further explanation.

Source: • Ranges and Seasonal Patterns 1976—1980, EIA, "Petroleum Statement, Annual (Final Summary)," 1981, EIA, "Petroleum Supply Annual."

• Monthly Data: 1981, EIA, "Petroleum Supply Annual, January—August 1982, EIA, "Petroleum Supply Monthly."

• September 3, 1982—Current Week Estimates based on EIA weekly data,



Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980					<del></del>			····	<del>*************************************</del>			
Crude Oil (Excl. SPR)	6.4	6.0	5.7	5,6	5.1	5.5	4.8	4.8	4.7	4.6	4.5	4.9
SPR	0	0	0	0	0	0	o o	0	0.1	0.1	0.1	0,2
Refined Products	2.2	1.9	1,8	1,5	1.5	1.4	1.4	1.4	1.6	1.6	1.7	1.8
Total (Gross Incl. SPR)	8.6	7.9	7.5	7.1	6.6	6.9	6.3	6.2	6.2	6.4	6.4	6.9
Total Exports	0.5	0.6	0.6	0.4	0.6	0.7	0.5	0.3	0.6	0.6	0.5	0.6
Total (Net Incl. SPR)	0.8	7.4	6.9	6.7	6.0	6,2	5.7	5,9	5.7	5.8	5.9	6.3
1981												
Crude Oil (Excl. SPR)	4.8	4,8	4,4	4.1	3,9	3.7	4.1	3.9	4.3	າດ	2.0	4.0
SPR	0.1	0.1	0.1	0.3	0.4	0.3	0.2	0.3	4.3 0.4	3.9 0.5	3.8 0.3	4.0
Refined Products	1.9	1.9	1.5	1.3	1.5	1.4	1.5	1.6	1.6	1.6	1.7	0.2
Total (Gross Incl. SPR)	6.8	6,8	6,0	5.7	5.8	5.4	5.8	5.8	6.4	6.0	5.7	1.7
Total Exports <sup>T</sup>	0.6	0,6	0,6	0.6	0.6	0.4	0.6	0.6	0.5	0.7	0.7	5.8 0.7
Total (Net Incl. SPR)	6.3	6.2	5.4	5.1	5.2	5,0	5.2	5.1	5.8	5.2	5.0	5.2
1982												
Crude Oil (Excl. SPR)	3,5	2.8	2.7	2.6	3.1	3.7	4.1	3,6				
SPR	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2				
Refined Products	1,6	1.7	1.6	1.5	1.5	1.4	1.5	1.3				
Total (Gross Incl. SPR)	5.2	4.7	4.5	4.3	4.8	5.2	5.8	5,2				
Total Exports <sup>1</sup>	8.0	8.0	0,9	8,0	8.0	0.7	0.7	0.9				
Total (Net Incl. SPR)	4.4	3.9	3.6	3,5	4.0	4.5	5.0	4.3				
Average for Four-Week Per	iod Endin	n!										
1982	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	
Crude Oil (Excl. SPR)	3,4	3,5	3,3	3.3	3.3	2.1	2.0		0.4		·	
SPR	0,2	0.2	0,2	0,1	ა.ა 0,1	3.1	3.2	3.2	3.4	3.6	3.5	
Refined Products	1,2	1.2	1.4	1,4	1.4	0.1 1.2	0,2 1.3	0.2	0.2	0.2	0.2	
Total (Gross Incl. SPR)	4.8	4.9	4.8	4.8	4.8	4,4	4.6	1.3 4.8	1.3 5.0	1.4	1.5	
Total Exports <sup>1</sup>	E0.8	E0.7	E0.7	E0.7	E0.7	E0.7	E0.7	4.8 E0.8	E0.8	5.2	5.1	
Total (Net Incl. SPR)	4.1	4.2	4,1	4.1	4.1	3.7	3,9	4.0	4.2	E0.8 4.4	E0.9	
<u> </u>					711		J,8	4.0	7,4	4·4	4.3	

14

E-Estimates based on most recent monthly data available

1 includes exports of crude oil and refined petroleum products. Exports of crude oil are prohibited under normal circumstances. Some crude oil is shipped to Canada in exchange on a barrel for-barrel basis. Shipments of crude oil to Petrole and the Virgin Islands are not prohibited because these territories are U.S. possessions.

Squee:

1980: EIA, "Petroleum Statement, Annual (Finel Summary),"

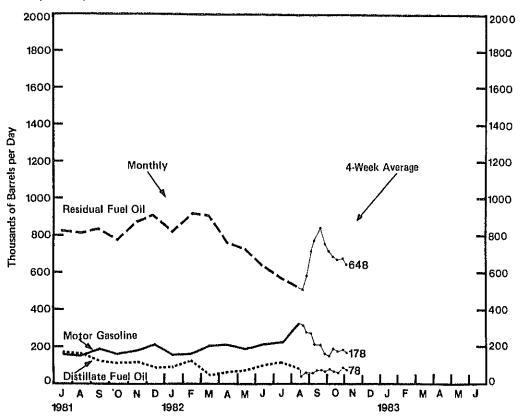
1981: EIA, "Petroleum Supply Annual."

3 January—August 1982: EIA, "Petroleum Supply Monthly"

September 3, 1982—Current Week: Four-week averages based on EIA weekly data

Note: Datali date may not edd to total due to Independent rounding.

### **Gross Imports of Petroleum Products by Product** (Thousands of Barrels per Day)



Year/Product	Jan	Feb	Mar	Apr	May	Jun	Ju1	Aug	Sep	Oct	Nov	Dec
1980		···········		<del></del>						***************************************		
Motor Gasoline <sup>1</sup>	141	154	155	155	132	148	149	141	106	152	126	121
Jet Fuel	96	43	100	110	73	86	93	67	77	86	63	60
Distillate Fuel Oil	179	237	193	154	126	108	117	77	101	115	133	166
Residual Fuel Oil	1,338	1,122	976	775	812	749	787	875	906	875	1,024	1,025
Other <sup>2</sup>	437	376	333	315	330	323	267	230	343	384	380	438
1981												
Motor Gasoline <sup>1</sup>	158	121	200	209	177	197	169	167	196	169	189	212
Jet Fuel	15	38	76	55	47	68	35	47	46	14	9	7
Distillate Fuel Oil	273	325	147	116	179	225	179	174	129	119	124	95
Residual Fuel Oil	1,015	954	699	584	741	540	830	819	841	786	880	916
Other <sup>2</sup>	434	462	385	366	345	344	309	380	389	492	492	476
1982												
Motor Gasoline <sup>1</sup>	158	165	202	208	199	218	237	334				
Jet Fuel	10	62	39	47	31	3	15	26				
Distillate Fuel Oil	96	130	48	59	74	100	124	79				
Residual Fuel Oil	821	928	910	762	738	643	576	519				
Other <sup>2</sup>	500	456	405	397	429	482	566	378				
Average for Four-We	ek Period I	Endina:										
1982	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	
Motor Gasoline <sup>1</sup>	323	287	281	212	211	169	159	194	184	192	178	
Jet Fuel	43	42	31	37	28	20	28	26	23	25	17	
Distillate Fuel Oil	45	59	53	73	75	67	79	71	62	84	78	
Residual Fuel Oil	517	589	727	782	848	758	716	695	671	679	648	
Other <sup>2</sup>	285	258	272	260	195	218	273	324	400	462	543	

<sup>1</sup> includes imports of finished motor gasoline and imports of motor gasoline blending components.

<sup>1</sup> Includes imports of trinisted motor gasonite and inputs of motor gasonite behaving component 2 Includes imports of kerosene, unfinished oils, and other oils.

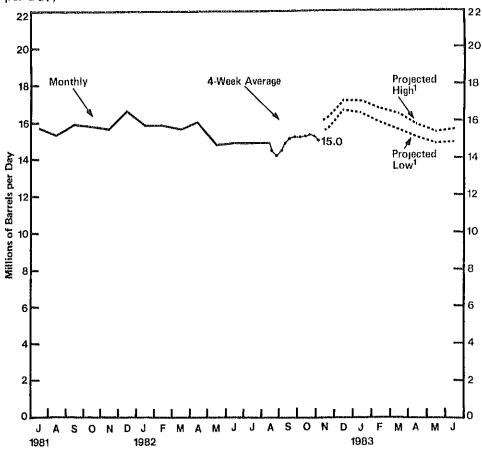
Source: • 1980: EIA, "Petroleum Statement, Annual (Final Summary)."

• 1981. EIA, "Petroleum Supply Annual."

• January—August 1982: EIA, "Petroleum Supply Monthly"

• September 3, 1982—Current Week: Four-Week averages based on EIA weekly data.

### Total Petroleum Products Supplied for Domestic Use (Millions of Barrels per Day)



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980	18.9	18.8	17.4	16.8	16.2	16.2	16.0	15.8	16.6	17.0	16.7	18.4
1981	18.4	17.0	15.9	15.4	15.4	16.1	15.7	15.3	15.9	15,8	15,6	16.6
1982	15.9	15.9	15.6	16.0	14.8	14.9	14.8	14.8				
Average for Four 1982	-Week Peri 9/3	od Endin 9/10	g: 9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	
<u> </u>	14.4	14.2	14.5	14.8	15.1	15.2	15.2	15.2	15.3	15.2	15.0	

<sup>1</sup> Projected See Appendix C for explanation of derivation of values

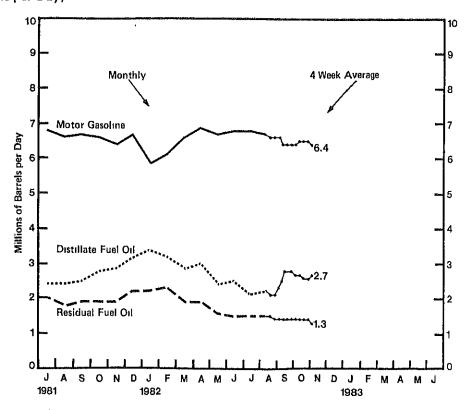
Source • 1980 EIA, "Petroleum Statement, Annual (Final Summary)."

• 1981 EIA, "Petroleum Supply Annual "

• January-August 1982 EIA, "Petroleum Supply Monthly."

• September 3, 1982—Current Week Four-week averages based on EIA weekly data

• Projections. EIA, Office of Energy Markets and End Use (August 1982)



Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980											A	
Motor Gasoline	6.3	6.6	6.4	6.8	6.7	6.7	6.7	6.6	6.5	6.7	6.2	6.6
Jet Fuel	1.1	1.1	1.1	1.1	1.0	1.1	1.1	1.0	1.1	1.0	1.0	1.1
Kerosene	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Distillate Fuel Oil	3.7	3.7	3.2	2.6	2.4	2.3	2.2	2.1	2.6	2.9	2,9	3,6
Residual Fuel Oil	3.1	3.1	2.7	2.4	2.2	2.3	2.3	2.3	2.4	2.2	2.5	2.7
Other	4.4	4.1	3.8	3.7	3.8	3.7	3,5	3.5	4.0	4.0	3,9	4.2
1981												
Motor Gasoline <sup>1</sup>	6.4	6.3	6.3	6.6	6.6	7.0	6,8	6.6	6.7	6,6	6,4	6.7
Jet Fuel	1,1	1.0	1.1	1,0	0.9	1.0	1.1	1.0	1.0	0.9	1.0	1.0
Kerosene	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0,1	0.2
Distillate Fuel Oil <sup>1</sup>	4.1	3.4	2.9	2,5	2.4	2.4	2.4	2.4	2.5	2.8	2.9	3.2
Residual Fuel Oil <sup>1</sup>	2.9	2.5	2.1	1.9	1.8	2.0	2.0	1.8	1.9	1,9	1.9	2.2
Other	3.7	3,5	3.4	3,3	3.5	3,4	3,3	3.3	3,5	3.5	3,3	3.3
1982												
Motor Gasoline <sup>1</sup>	5.9	6.1	6.6	6.9	6.7	6.8	6.8	6.7				
Jet Fuel	1.0	1.1	1,0	1.0	1.0	1,0	1,0	1.0				
Kerosene .	0.2	0.2	0.1	0,1	0.1	0.1	0.1	0.1				
Distillate Fuel Oil <sup>1</sup>	3.4	3,2	2.9	3.0	2.4	2.5	2.1	2.2				
Residual Fuel Oil <sup>1</sup>	2.2	2,3	1.9	1.9	1.6	1.5	1,5	1,5				
Other	3.2	3.2	3.1	3.2	3.1	3.1	3.3	3.4				
Average for Four-Weel	k Period	Endina:										
1982	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	
Motor Gasoline <sup>1</sup>	6.6	6.6	6.6	6.4	6,4	6.4	6.4	6.5	6.5	6.5	6,4	<del></del>
Jet Fuel	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	1.0	
Kerosene	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0,2	
Distillate Fuel Oil	2.1	2,1	2.3	2,5	2.8	2.8	2.7	2.7	2,6	2.6	2.7	
Residual Fuel Oil	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.7 1.3	
Other	3.1	2,9	3.0	3.3	3,3	3,5	, 3.6	3.5	3.5	3.5	3.4	

<sup>1</sup> Products supplied statistics for 1981 and 1982 should not be compared with those for prior years because, in January 1981, EIA modified its definitions for motor gasoline, distillate fuel oil, and residual fuel oil. See Appendix D for further explanation.

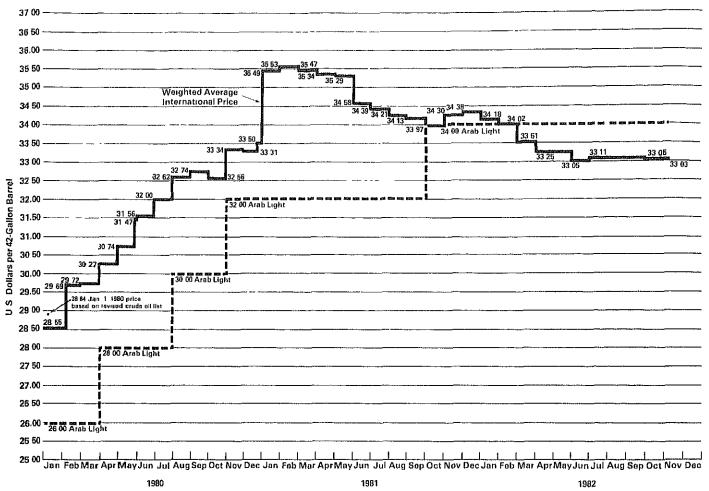
Source: • 1980: EIA, "Patroleum Statement, Annual (Final Summary)."

• 1981: EIA, "Petroleum Supply Annual."

• January-August 1982. EIA, "Patroleum Supply Monthly"

• September 3, 1982—Current Week: Four-week averages based on EIA weekly data.

### World Crude Oil Prices1 (Dollars per Barrel)



✓ Internationally traded oil only, Average price (FOB) weighted by estimated export volume.

Note Beginning with the May 1, 1981 Issue of the Weakly Petroleum Status
Report, the world crude oil price is based on a revised crude list
Additions Saudi Arabia's Arabian Heavy, Dubai's Fatch, Egypt's Suez Blend, and Moxico's Maye
Comissions Canadian Heavy
Replacements, Iraq's Kirkuk Blend for Iraq's Basrah Light
The above graph shows an estimated world crude oil price based on this revised list
beginning January 1, 1981 An esteriek shows the January 1, 1980 price based on the revised
list, All other 1980 prices represent the old crude list before revisions

### World Crude Oil Prices<sup>1</sup> (Dollars per Barrel)

	Type of							t Change rice From
Country	Crude/ API Gravity	Current Price	In Effect 1 Jan 82	In Effect 1 Jan 81	In Effect 1 Jan 80	In Effect 31 Dec 78	In Effect 1 Jan 80	In Effect 31 Dec 78
OPEC					***			
Saudı Arabia	Arabian Light 34 <sup>0</sup> (Bønch mark crude)	34 00	34,00	32 00	26,00	12 70	30,8	167 7
Abu Dhabi Dubai Catar Iran Iran Kuwait Nautral Zone Algeria Nigeria Libya Indonesia Venezuela Gabon Ecuador	Saudi Berri 39 <sup>o</sup> Arabian Heavy 28 <sup>o</sup> Murban 39 <sup>o</sup> Fateh 32 <sup>o</sup> Dukhan 40 <sup>o</sup> Iranian Light 34 <sup>o</sup> Kirkuk 36 <sup>o</sup> Kuwait Blend 31 <sup>o</sup> Khafji 28 <sup>o</sup> Saharan 44 <sup>o</sup> Bonny Light 37 <sup>o</sup> Es Sider 37 <sup>o</sup> Minas 34 <sup>o</sup> Tia Juana 26 <sup>o</sup> Mandji 29.6 <sup>o</sup> Oriente 30 <sup>o</sup>	34,52 31,00 34,56 33,86 34,49 31,20 34,83 32,30 31,03 35,50 35,50 35,10 34,53 32,88 34,00 32,50	35 40 31 00 36 50 33 86 35 45 34,20 34 93 32 30 31 03 37,00 36 50 36,50 35,00 32,88 34,00 34,25	33 52 31 00 36.56 36 93 37 42 37 00 37 50 35.50 35.20 40 00 40 78 35 00 32 88 36 00 40 06	27 52 25 00 29 56 27 93 29 42 230.00 29 29 27 50 27.20 33.00 29.97 34 50 27.50 25.20 28 00 33.50	13 23 12 02 13 26 12 64 13.19 13.45 13.17 12.22 12 03 14 10 15.12 13.68 13.55 12.72 12.59 12.35	25 4 24 0 16 9 21 2 17.2 4.0 18.9 17 5 14 1 7 6 18 5 1.7 25 6 30 5 21,4	160 9 167 9 160 6 167.9 161.5 132 0 164 5 164 3 157 9 151.8 134.8 156 6 154.8 158.5 170.1
Total OPEC <sup>3</sup>	NA	33 64	34.13	34.82	28,30	13.03	18.6	157,4
Non OPEC United Kingdom Norway Mexico " Egypt Oman Syria Malaysia Brunei U.S.S.R.5	Forties 36.5° Ekofisk 42° Mexican Light 32° Mexican Heavy 22° Suez Blend 33° Oman 36° Suwadiyah 25° Miri 38° Seria 36.5° Export Blend 33°	33.50 34.25 32.50 45 00 32.60 34.00 30.00 35.60 35.10 31.20	36.50 37.25 35.00 26.50 34.00 35.00 30.00 36.50 36.10 35.49	39.25 40.00 38.50 34.50 40.50 37.50 36.03 41.30 40.35 39.25	29,75 32,50 32,00 28,00 34,00 30,26 31,39 33,60 33,40 33,20	14.00 14,20 13.10 NA 12.B1 13.06 11.84 14.30 14 15	12.6 6 4 1.6 10.7 -4.1 12.4 4.4 6.0 5.1 6.0	139.3 141.2 148 1 NA 154.5 160.3 157.7 149.0 148 1 136.4
Total Non-OPEC 3	NA	31.84	34 35	38 54	31.94	13.44	-0.3	136.9
Total World 3	NA	33.03	34.18	35.49	28,84	13 08	14.5	152.5
United States <sup>6</sup>	NA	32.51	34.16	36,69	29.35	13.38	108	143.0

NA=Not Applicable.

1 Official sales prices or estimated term contract prices, spot prices excluded 2 37c higher at 60 days' credit.

3 Average prices (FOB) weighted by estimated export volume.

4 On 60 days' credit.

5 Average delivered cost to Northwest Europe.

6 Average prices (FOB) weighted by estimated import volume

Source: 

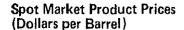
DOE, Office of International Affairs, November 17, 1982.

Platt's Oligram Price Report.

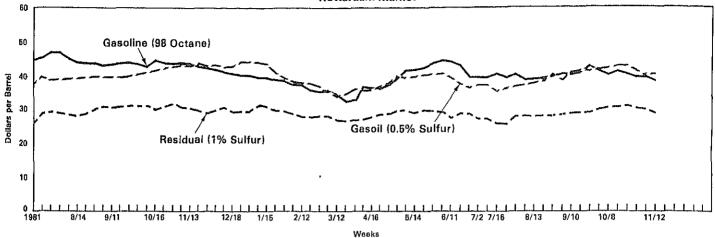
Petroleum Intelligence Weekly.

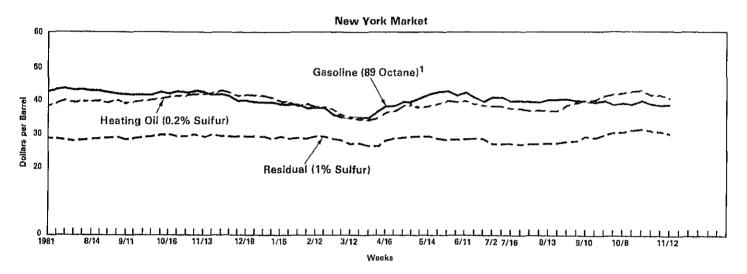
Oll Buyers' Guide.

Europe Oil Prices.





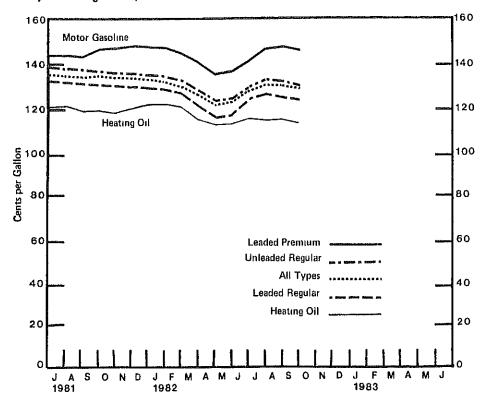




 <sup>1</sup> The prices shown through September 25, 1981 are for 94 octane gasoline rather than for 89 octane gasoline.
 Source: • Oil Buyers' Guide, Weekly Oil Market Product Report.
 • DOE, Office of International Affairs.

		Motor 6	Basoline	Gasoil/H	leating Oil <sup>†</sup>	Residu	al Fu
		Rotterdam (98 Octane)	N.Y. <sup>3</sup> (89 Octane)	Rotterdam (0.5% Sulfur)	N.Y. <sup>4</sup> (0.2% Sulfur)	Rotterdam (1% Sulfur)	(19
Nov	6	44.20	42.71	43.23	41.69	30.48	2
	13	43.32	42.15	43,16	41.90	30.33	2
	20	42.79	41.54	43.70	41.90	29.65	
	27	42.73	41.54	43.10	42.59	28.83	
Dec	4	42.15	41.03	43.57	42.10	29.88	;
1760	11	41.03	39.61	42.83	41.16	30.41	
	18	41.03	39.82	43.16	41.48	29.20	
	24	40.50	39.50	44.57	41.48	29.50	
Jan	8	39.98	39.67	44.30	40.42	31.68	
	15	38.68	38.72	43.57	<b>39</b> .90	30.78	
	22	38.57	38.93	40.88	39.38	29.50	:
	29	38.22	38.30	39.21	38.22	29.73	
Feb	5	37.22	37.67	38.40	38.54	28.68	
	12	37.22	37.61	<b>3</b> 7.87	<b>3</b> 7.90	27,93	
	19	<b>3</b> 5,93	37.61	<b>3</b> 7.87	37.80	<b>27.93</b>	
	26	35.52	35.72	37.00	37.38	28.08	
Mar	5	35.46	34.88	35.32	35.28	28.08	
	12	34,41	34.57	34.38	33.60	26.95	
	19	32.42	34.55	34.99	34.02	26.50	
	26	32.83	34.52 .	36.13	34.06	26.65	
Apr	2	36.64	36.54	35.52	34.54	26.80	
A bi	9	36.17	38.01	35.72	36.12	27.78	
	16	36.64	38.22	36.66	36.54	28.53	
	23	37.51	39.69	37.87	38.22	28.75	
	23 30	39.57	39.40	39.68	38.32	29.43	
B.4		41.6 <b>8</b>	40.53	38.81	37.80	29.80	
May	7		40.93 41.87		38.32	29.73	
	12	41.85		39.21			
	19	42.67	42.29	40.21	38.85	29.73	
	26	43.79	42.61	40.35	39.69	29.43	
Jun	4	44.37	41.68	40.55	39.48	29.05	
	11	44.08	42.21	39.34	39.90	27.40	
	18	43.08	40.66	37.60	38.64	28.60	
	25	39.57	39.56	36.53	38.33	28.45	
Jul	2	39. <b>86</b>	40.07	<b>37.27</b>	38.01	27.10	
	9	39.86	40.07	37.27	38.01	27.10	
	16	40.04	39.73	35.32	37.59	25.90	
	23	39.57	39.84	36.13	37. <b>38</b>	25.53	
	30	40,12	39.59	36.98	36. <b>9</b> 6	27.78	
Aug	6	38. <b>80</b>	39.59	37.33	37.06	<b>28.0</b> 0	
	13	38.45	40. <b>00</b>	37.60	37.80	27.85	
	20	39.1 <b>5</b>	40. <b>00</b>	38.70	37.80	27,85	
	27	39. <b>86</b>	40.05	40.28	38.32	<b>27.8</b> 5	
Sep	3	40.56	39. <b>8</b> 4	38.46	39.48	28.38	
•	10	40.39	39.69	41.02	39.58	28. <b>6</b> 8	
	17	41. <b>0</b> 3	39.38	41.22	39. <b>9</b> 0	28.75	
	24	42.61	39.38	41.22	41.26	28.90	
Oct	1	41.03	38.54	41.96	41.58	29.88	
	8	40.15	38.96	42.29	42.00	30.33	
	15	41,03	38.74	42.96	42.42	30.48	
	22	40.04	39.69	42.76	42.74	30.78	
	29	39.39	38.96	41.42	41.37	30.26	
	25 5	39.80	38.45	39.88	41,37	29. <del>9</del> 5	
Nov							

<sup>1</sup> Refers to No. 2 Heating Oil.
2 Refers to No. 6 Oil.
3 East Coest Cargoes.
4 New York Harbor Reseller Barge Prices.
Source: • Oil Buyors: Guide, Weekly Oil Market Product Report.
• DOE, Office of International Affairs.



Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980			<del></del>				*******					- · · · · · · · · · · · · · · · · · · ·
Motor Gasoline												
Leaded Premium	114.9	123.2	127.7	129.2	129.5	130.0	130.7	131,0	130.4	130.1	129.9	131,0
Leaded Regular	108.6	115.9	120.2	121.2	121.5	121.7	121.6	121.0	119.7	118.8	118.8	119.7
Unleaded Regular	113,1	120.7	125.2	126.4	126.6	126.9	127.1	126.7	125.7	125.0	125.0	125.8
All-types	111.0	118.6	123.0	124.2	124.4	124.6	124,7	124.3	123,1	122,3	122,2	123.1
Residential Heating Oil	90.8	95.3	97.1	97.4	97.2	97.9	97.9	97,9	98.1	98.7	101.0	106.5
1981												
Motor Gasoline												
Leaded Premium	133.8	141.0	144.9	145.1	144.7	144.6	144.6	144.4	145.6	145.7	146.2	146.0
Leaded Regular	123.8	132.1	135.2	134.4	133.3	132.4	131.5	131.0	130.5	129.9	129.7	129.3
Unleaded Regular	129.8	138.2	141.7	141.2	140.0	139.1	138.2	137.6	137.6	137.1	136.9	136.5
All-types	126.9	135.3	138.8	138.1	137.0	136.2	135.3	134.8	135.8	135.3	135.1	134.8
Residential Heating Oil	114,4	123.4	125.5	123,9	122.7	120.9	121.0	119.4	119.7	118.8	120.8	122.0
1982												
Motor Gasoline												
Leaded Premium	145.6	143.8	140.7	136.8	137.9	140.8	145.0	145.8	144.1			
Leaded Regular	128.5	126.0	120.6	114.8	116.6	124.2	126.3	125.4	123.6			
Unleaded Regular	135.8	133.4	128.4	122.5	123.7	130.9	133.1	132.3	130.8			
All-types	134.1	131.8	126.8	121.0	122.4	129.6	131.8	131.0	129.5			
Residential Heating Oil	122.0	120.7	115.3	113.2	114.3	116.2	115.8	R115.9				

R-EIA revision.
P-Preliminary.

Note Motor gasoline data include prices from self service stations Beginning with September 1981, the Bureau of Labor Statistics has changed the weights used in the calculation of average motor gasoline prices. In the "all types" caregory gasohol is now included, and unleaded premium is weighted more heavily.

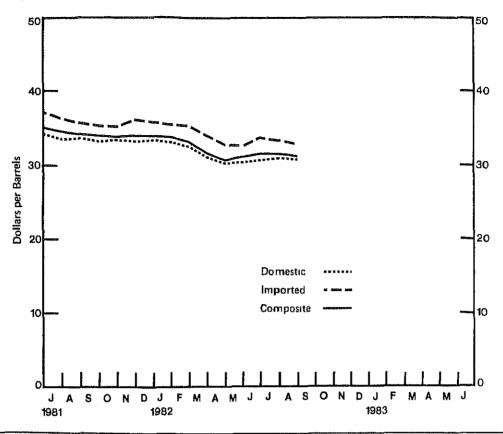
Source: 

Motor Gasoline—Bureau of Labor Statistics. See definitions for description of survey.

Residential Heating Oil—Through October 1980. Form EIA—9, "No. 2 Heating Oil Supply/Price Monitoring Report."

November 1980 Forward: Form EIA—9A, "No 2 Distillate Price Monitoring Report."

### Refiner Acquisition Cost of Crude Oil (Dollars per Barrel)



Year/Type	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
1980												
Domestic	19.78	21,22	22.07	22.89	23,63	24.48	25.05	24,98	25,37	26,21	26.51	28,55
Imported	30,75	32.40	33.42	33,54	34.33	34,48	34.51	34.44	34,46	34.63	35.09	35.63
Composite	24.81	26.11	26.88	27.09	27.85	28,80	28.73	28.70	28.96	29,56	29.79	31.39
1981												
Domestic	32.71	36.27	36,97	35,58	35.21	34,20	33.76	33.79	33.47	33,48	33.49	33.51
Imported	38.85	39.00	38.31	38.41	37.84	37.03	36.58	35.82	35.44	35.43	36.21	35.95
Composite	34.86	37.28	37.48	36.58	36.11	35.03	34.70	34.46	34.11	34.07	34.33	34,33
1982												
Domestic	33.39	32.71	31.08	30.27	30.37	30.79	30.92	R30.85				
Imported	35,54	35.48	34.07	32.82	32.78	33.79	33.44	R32.95				
Composite	33.95	33.40	31.81	30.83	31.02	31,74	31.74	R31.45				

R=EIA revision.

Source: e 1980: ERA Form 49, "Domestic Crude Oil Entitlements Program Refiners Monthly Report."

• January 1981 Forward. Form EIA-14, "Refiners Monthly Cost Report."

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### Appendix A: EIA Weekly Data: Survey Design and Estimation Methods

The Weekly Petroleum Reporting System (WPRS) comprises five surveys. the "Refinery Report" (EIA-161); the "Bulk Terminal Stocks Report" (EIA-162); the "Pipeline Product Stocks Report" (EIA-163), the "Crude Oil Stocks Report" (EIA-164); and the "imports Report" (EIA-165). The EIA weekly reporting system was designed to collect data similar to those collected under the monthly Joint Petroleum Reporting System (JPRS) and the monthly imports system. In the WPRS, selected petroleum companies report weekly data to EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On the Forms EIA-161 through EIA-164, companies report data on a custody basis. On the Form EIA-165, the importer of record reports each shipment entering the United States. Current weekly data and the most recent monthly data from the JPRS are used to estimate the published weekly totals.

#### Sample Frame

The sample of companies that report weekly in the WPRS was selected from the universe of companies that report monthly in either the JPRS system or the ERA-60 system (for imports). All sampled companies report data only for facilities in the 50 States and District of Columbia. The EIA-161 sample frame includes all petroleum refineries in the United States and its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and bulk terrimals that blend motor gasoline. The EIA-162 sample frame includes all bulk terminal facilities in the United States and its territories that have total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline. The EIA-163 sample frame includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including interstate, intrastate and intracompany pipeline movements. Pipeline companies that only transport natural gas liquids are not included in the EIA-163 frame. Only those pipeline companies which transport products covered in the weekly survey are included. The EIA-164 sample frame consists of all trunk pipeline companies in the United States and its territories which transport crude oil, all refining companies, all crude oil producers, all terminal operators, and all storers of 1,000 barrels or more of crude oil. The EIA-165 sample frame includes all importers of record of crude oil and petroleum products into the United States and Puerto Rico.

#### Sampling

The sampling procedure used for the weekly system is the cut-off method. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous period. Companies are chosen for the sample beginning with the largest and adding companies until the total sample covers about 90 percent of the total for the previous time period.

	Refiners (Refineries)	Bulk Terminals	Pipelines	Crude Oil Stock Holders	Importers
Weekly Form	EIA-161	EIA-162	EIA-163	EIA-164	EIA-165
Monthly Frame Size	186(347)	173	65	<b>29</b> 6	955
Weekly Sample Size	84(215)	93	65	111	61

#### **Collection Methods**

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. All canvassed firms and terminal operating companies must file by 5:00 p.m. on the Monday following the close of the report period, 7 a.m. Friday. During the processing week, company corrections of the prior week's data are also entered.

### Estimation and Imputation

After the company reports have been checked and entered into the weekly data base, ratio estimates of the weekly totals are calculated from the reported data. First, the current week's data for a given product reported by companies in that region are summed. (Call this weekly sum, W<sub>s</sub>). Next, the most recent month's data for the product reported by those same companies are summed. (Call this monthly sum, M<sub>s</sub>). Finally, let M<sub>t</sub> be the sum of the most recent month's data for the product as reported by all companies. Then, the current week's ratio estimate for that product for all companies, W<sub>t</sub>, is given by:

$$W_t = \frac{M_t}{M_s} \cdot W_s$$

This procedure is used directly to estimate total weekly inputs to refineries and production. To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Under such conditions, the ratio method is known to result in large errors. Hence, a number of other procedures for estimating weekly imports were considered. The average ratio method was selected for estimating imports because it produces estimates that were close to benchmark values computed from monthly data. Estimates are obtained using the ratio method, but with each company in turn omitted from the sample. These estimates are then averaged to obtain the average ratio estimate.

Since M<sub>t</sub>, the total of the most recent month's data, includes companies which may not have responded weekly, the ratio method of estimation automatically imputes for nonresponse.

### Response Rates

The response rate as of the day after the filing deadline is about 80 percent for the EIA-161; 75 percent for the EIA-162; 95 percent for the EIA-163; 80 percent for the EIA-164; and greater than 95 percent for the EIA-165. However, more forms are received the next day, bringing the final response rates up. Late respondents are contacted by telephone. Nearly all of the major companies report on time. The nonresponse rate for the published estimates is usually between 2 percent and 5 percent.

### Appendix B: Interpretation and Derivation of Average Inventory Levels

The national inventory (stocks) graphs for total petroleum products, crude oil, motor gasoline, distillate fuel oil, and residual fuel oil in this publication include features to assist in comparing current inventory levels with past inventory levels and with judgments of critical levels. Methods used in developing the average inventory levels and minimum operating levels are described below.

#### Average Inventory Levels

The charts displaying inventory levels of total petroleum products (p. 7), crude oil (p. 7), motor gasoline (p. 9) distillate fuel oil (p. 11), and residual fuel oil (p. 13) provide the reader with actual inventory data compared to an "average range" from the most recent 3-year period running from January through December or from July through June. The ranges are updated every six months in March and October. The 3-year period is adjusted by dropping the oldest 6 months and including the most recent 6 months. The ranges also reflect seasonal variation determined from a longer time period. The seasonal factors, which determine the shape of the upper and lower curves, are updated annually in October, using the most recent year's final monthly data.

The monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive (i.e., the series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported inventory levels). The intent of deseasonalization is to remove only annual variation from the data. Thus, deseasonalized series would contain the same trends, cyclical components, and irregularities as the original data. The seasonal factors for total petroleum (crude and products), crude oil, distillate fuel oil, and residual fuel oil were derived using monthly data from 1975-1981. For motor gasoline, the seasonal factors were based on monthly data from 1975-1976 and 1978-1981. In 1977, monthly stock levels of motor gasoline stayed at the same high level for the entire year. Since there was virtually no seasonal behavior in motor gasoline stocks that year, 1977 was not used in the determination of seasonal patterns for motor gasoline stocks.

After seasonal factors are derived, data from the most recent 3-year period (January-December or July-June) are deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard deviation of the deseasonalized 36-months is calculated adjusting for extreme data points. The upper curve of the "average range" is defined as the average plus the seasonal factors plus the standard deviation. The lower curve is defined as the average plus the seasonal factors minus the standard deviation. Thus, the width of the "average range" is twice the standard deviation. The values of the upper and lower curves are presented in the table below.

### Values of Average Ranges in Inventory Graphs (Millions of Barrels)

	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec
						Lower F	lange					
Total Petroleum Crude Oil Motor Gasoline Distillate Fuel Oil Residual Fuel Oil	1185.5 347.0 253.8 161.6 71.0	1143.1 345.5 260.1 132.0 67.9	1138.5 354.0 256.0 120.3 64.8	1149.3 358.2 245.1 121.5 66.1	1163.9 355.5 235.8 130.3 69.4	1175.9 354.4 230.9 145.0 66.7	1204.2 349.2 229.0 167.5 70.2	1219,5 344,4 227,6 187,7 70,3	1244.2 344.8 229.1 206.0 75.1	1250.6 352.7 221.1 212.5 79.1	1252.9 351.4 226.6 213.0 79.5	1209.4 341.8 237.1 191.1 77.6
						Upper R	lange					
Total Petroleum Crude Oil Motor Gasoline Distillate Fuel Oil Residual Fuel Oil	1301.2 377.8 279.7 205.5 88.5	1258.8 376.3 286.1 175.9 85.4	1254.2 384.8 282.0 164.2 82.4	1265,0 388,9 271,0 165,4 83,6	1279.6 386.2 261.8 174.2 86.9	1291.6 385.1 256.8 188.9 84.3	1319.9 379.9 255.0 211.4 87.8	1335,3 375,1 253,5 231,6 87,8	1359.9 375.5 255.0 249.9 92.6	1366.3 383.5 247.1 256.4 96.7	1368.6 382.2 252.6 256.9 97.0	1325.1 372.5 263.0 235.0 95.1

### Minimum Operating Levels

The lines labeled "minimum operating inventory" for crude oil, motor gasoline, distillate fuel oil, and residual fuel oil were derived by the National Petroleum Council from a 1978 survey of petroleum refineries, bulk terminal operators, and petroleum pipelines. The Council also surveyed industry experts. The findings were published in "Petroleum Storage and Transportation Capacities" in December 1979. In that document, minimum operating inventory is described as follows:

Inventory below this level is not available for consumer use because it is required to fill pipelines, tank bottoms and refinery process equipment; facilitate blending to meet the product specifications; prepare for planned maintenance periods; handle unavoidable but anticipated emergencies; and sustain uninterrupted operations. Runouts and shortages would begin to occur if inventory were to fall below this level.

The values were: crude oil -- 290 million barrels; motor gasoline -- 210 million barrels; distillate fuel oil -- 125 million barrels; and residual fuel oil -- 60 million barrels.

Since the National Petroleum Council did not derive a minimum operating inventory level for total petroleum stocks, the line labeled "observed minimum" is based on the lowest inventory level observed during the same 3-year base period that was used in the derivation of the average inventory levels. For crude oil, motor gasoline, distillate fuel oil, and residual fuel oil, the observed minimum and the minimum operating inventory are quite close. Hence, it is thought that the observed minimum is a reasonable proxy for the minimum operating inventory.

### Appendix C: Projection of Products Supplied from the Short Term Energy Outlook

The projections of "high" and "low" total petroleum demand, shown in the WPSR as total product supplied, are from the Office of Energy Markets and End Use, Short-Term Energy Outlook, August 1982 (Outlook).

Three forecast cases are presented in the <u>Outlook</u> based on differing assumptions about the world price of crude oil. In case 1, it is assumed that prices decrease to an effective OPEC marker crude price of \$28 per barrel by the end of 1982 and remain at the level in 1983. In case 2, imported crude oil prices are stable at the July 1982 level through 1982, then rise at the U.S. inflation rate in 1983. In case 3, crude oil prices rise at 2 times the U.S. rate of inflation in 1982 and 3 times the inflation rate in 1983. Macroeconomic inputs are based on a forecast from Data Resources, Inc. (DRI CONTROL 072782).

The "high demand" case is formed by adding the case 1 (low price) forecast of total demand to the square root of the sum of the squares of increases in demand resulting from the following changes in key variables: (1) a 5 percent increase in heating degree-days over the base case, (2) a 7 percent increase in cooling degree-days over the base case, (3) an increase in income over the base case that reflects average forecast errors over a 3-year period, and (4) a 5.5 percent decrease in new car efficiency from the base case in 1982 and 12.6 percent decrease from the base case level in 1983. The "low demand" case is formed by subtracting from the case 3 (high price) forecast the square root of the sum of the squared decreases in demand resulting from decreases from the base case for heating degree-days, cooling degree-days, and income; and a 9.1 percent increase from the base case from the base case from the base case in 1983.

For detailed information on the assumptions used in the forecast methodologies, please refer to the published report, Short-Term Energy Outlook, August 1982.

Copies of the report are available from.

National Energy Information Center Room 1F-048, Forrestal Building 1000 Independence Avenue, S.W. Washington, D.C. 20585 Telephone 202-252-8800

### Appendix D Changes in Reporting of Monthly Data-January 1981

In January 1981, new forms were introduced for the collection of monthly data in the Joint Petroleum Reporting System. At that time, several major changes were made in the reporting of motor gasoline, distillate fuel oil, and residual fuel oil. The reporting changes were made to describe industry operations more accurately. However, because of the changes outlined below, the monthly information shown in the WPSR for 1981 and 1982 should not be directly compared to information for prior years. The series affected by the January 1981 changes are products supplied and production of motor gasoline, distillate fuel oil, and residual fuel oil.

### Motor Gasoline Changes

Prior to 1979, the EtA product supplied series for motor gasoline was consistently lower than the gasoline sales information collected by the Federal Highway Administration. There were two major reasons for the difference. First, refinery operations particularly the flows of unfinished oils and the redesignation of some finished products, were not being accurately described on the EIA survey forms. Second, a large amount of gasoline was being produced away from refineries at "downstream blending stations" to take advantage of provisions in regulations governing the amount of lead that could be added. These blending stations were not reporting gasoline production to the EIA prior to January 1981.

In January 1981, blending stations were added as reporters of motor gasoline production, and the reporting forms and definitions were changed to reflect more accurately the flow of products at refineries. For a further description of these changes and an indication of the magnitude of the difference between the old- and new-basis series, see Note 4 in the "Explanatory Notes" of the "Petroleum Supply Monthly."

### Distillate and Residual Fuel Oil Changes

The monthly statistics on production and product supplied of distillate and residual fuel oil for January 1981 forward reflect actual reported data even though these fuels can be further processed after initial distillation. The figures for prior years were adjusted to reflect the renaming or reclassifying of distillate and residual fuel oils as unfinished oils. Reclassification of these fuels might occur when a refiner ships a distillate or residual fuel oil to another refinery or to a bulk storage facility and the receiving facility, intending the oils to be processed further, reports the receipt of this fuel as a receipt of unfinished oils. Before January 1981, production statistics for distillate and residual fuel oils were adjusted to compensate for this problem on the basis of the difference between reported receipts and shipments of unfinished oils. Of the difference, two-thirds was allocated to distillate and one-third to residual. This adjustment was dropped in January 1981. Instead, the production statistics and products supplied estimates now reflect the data as reported. Monthly figures for total petroleum product supplied will not be affected by the change, however, because of an adjustment for "reclassified" product now shown in the monthly balance. The adjustments made in 1980 are shown in the table below. For further information about these changes, see Note 4 of the "Explanatory Notes" in the "Petroleum Supply Monthly."

Adjusted and Unadjusted Production of Distillate and Residual Fuel Oils by Month for 1980 (Thousand Barrels per Day)

		Distillate Fuel Oil	]	Residual Fuel Oil					
Month	Adjusted	Unadjusted	Difference	Adjusted	Unadjusted	Difference			
lanuary	3,013	3,093	80	1,771	1,812	41			
February	2,766	2,888	122	1,773	1,836	63			
March	2,557	2,690	133	1,584	1,652	68			
April	2,460	2,554	94	1,595	1,643	48			
May	2,474	2,610	136	1,509	1,579	48 70			
June	2,646	2,721	75	1,575	1,613	38			
July	2,689	2,783	94	1,480	1,513	38 48			
August	2,461	2,582	121	1,444	1,506				
September	2,686	2,726	40	1,495	1,516	62			
October	2,589	2,650	61	1,512		21			
November	2,703	2,823	120	1,572	1,543	31			
December	2,891	3,052	161	1,660	1,641 1,743	62 83			
Average	2,661	2,764	103	1,580	1,634	54			

Source: EIA, "Petroleum Supply Monthly," March 1982.

### Appendix E: Calculation of World Oil Prices (page 19)

The weighted average international price of oil, shown in the "Highlights" and on page 19, is an average calculated using specific crude oil prices weighted by the estimated crude oil export volume for each oil-producing country. To develop the table shown on page 19, a list of major oil producing/exporting countries was chosen. For each country, the official selling price of one or more representative crude oils was determined by investigating a number of industry publications (i.e., "Oil Buyers' Guide," "Platt's Oilgram Price Report," "Petroleum Intelligence Weekly," and "Europe Oil Prices") and by contacting oil market analysts.

Then, the appropriate crude oil volumes to be used as weighting factors for each country were determined. These volumes are estimates based on a number of sources which provide data on production, consumption, and exports for these countries. Export volumes for a number of smaller producing/exporting countries, not listed in the table, are included in the weighting factors. After the export volumes had been determined, simple mathematical weighted averages were calculated to arrive at the "Total OPEC," "Total Non-OPEC," and "Total World" prices.

The average United States (FOB) import price is derived by the same basic procedure as the world oil price, that is, taking the representative official crude oil price of a specific crude oil from a particular country and weighting this price by a certain volume of crude oil. In this case, the weighting factors are the volumes of crude oil imported into the U.S. from pertinent countries import volumes from a number of smaller producing/exporting countries, not listed in the table, are included in the weighting factors.

Both the import and export volumes are preliminary. Due to their origin, these estimates cannot be fully verified. These volumes are updated monthly, or more frequently when changes in oil market conditions make updating appropriate.

#### Definitions

- Barrels throughout the report are 42-gallon barrels
- Crude Oil Inputs. The total crude oil put into processing units at refineries. Crude oil inputs are a measure of the performance level of refineries and give an indication of the quantity of raw material actually being made into products such as gasoline, distillate fuel oil, and residual fuel oil.
- Distillate Fuel Oils (No. 1, 2, and No. 4 fuel oils and No. 1 and No. 2 diesel fuels) are light fuel oils used primarily for home heating, as a diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and for electric power generation
- EIA Weekly Data. These are preliminary figures based on data supplied to the EIA by selected petroleum companies; published figures include estimates for other, non-sampled companies based on currently available monthly data. Weekly data indicate broad trends such as increases or decreases in demand or production.
- Imports are defined in this report as gross imports. Imports of crude oil do not include imports to the Strategic Petroleum Reserve. Imports of minor products ("other oils"), as shown on page 15, include aviation gasoline, kerosene, unfinished oils, liquefied petroleum gases, plant condensate, petrochemical feedstocks, lube oils, waxes, special naphthas, coke, asphalt, and other miscellaneous oils.
- Monthly Data for 1980 are from EIA, Energy Data Reports, "Petroleum Statement, Annual (Final Summary)," 1981 data are from the "Petroleum Supply Annual;" 1982 data are from the "Petroleum Supply Monthly," information on stocks, product supplied, and production of refined products are collected from a universe of refiners, operators of bulk terminals, and pipeline operators. Companies supply monthly data after their records are finalized.
- Motor Gasoline. Included are finished leaded gasoline, finished unleaded gasoline, blending components in the gasoline range, and gasohol. This definition applies for data beginning with the week of January 30, 1981. Gasohol was not included in the motor gasoline definition before that date. Motor gasoline imports do not include gasohol.
- Refinery Capacity Utilization is the ratio of the total amount of crude oil, unfinished oils, and natural gas plant liquids run through crude oil distillation units to the operable capacity of these units. In the period 1979-1981 the refinery capacity utilization for all U.S. refineries ranged between 87 percent and 66 percent. The ratio for an individual refinery may fluctuate much more depending on the type of crude and other raw materials processed, the type of products produced, and the operating conditions of the refinery.
- Retail Motor Gasofine Prices. The motor gasoline prices shown are calculated monthly by the Bureau of Labor Statistics (BLS) in conjunction with the construction of the Consumer Price Index (CPI). These prices are collected in 85 urban areas selected to represent all urban consumers—about 80 percent of the total U.S. population. The service stations are selected initially, and on a replacement basis, in such a way that they represent the purchasing habits of the CPI population. Service stations in the current sample include those providing all types of service (i.e., full-, mini-, and self-service).
- The refiner acquisition cost of crude oil is the average price paid by refiners for crude oil booked into their

- refineries in accordance with accounting procedures generally accepted and consistently and historically applied by the refiners concerned. Domestic crude oil is that oil produced in the United States or from the outer continental shelf as defined in 43 USC Section 1131. Imported crude oil is either that oil reported on Form ERA-51, the "Transfer Pricing Report," or any crude oil which is not domestic oil. Prices do not include price of unfinished oils or SPR,
- Residual Fuel Oils (No. 5 and No. 6 Fuel Oils) are heavy oils used primarily for electric power generation, for industrial and commercial space heating, as a ship fuel, and for various industrial uses.
- Stock figures shown here are for those stocks held at refineries, in pipelines, and at bulk terminals with a capacity over 50 thousand barrels. Stocks held by product retailers and resellers, as well as tertiary stocks held at the point of consumption, are excluded. Stocks of individual products held at gas processing plants are excluded. All plant stocks were included in "Other Oils" and "Total."
- Stock Change (Refined Products) The product stock change shown on the U.S. Petroleum Balance Sheet for the current 4-week period is calculated in the following way, an average daily stock change is calculated for major refined products (i.e., all actual reported stocks), this stock change is added to an estimate for minor product stock change based on historical monthly data. a daily average stock change for refined product stocks for the 4-week period is then calculated. To calculate minor product stock change, the stock levels shown for other oils in the stock section of the balance sheet are used These other oils stock levels are derived by. 1) computing an average daily rate of stock change for each month based on monthly data for the past six years, 2) using this daily rate and the minor stock level from the most recent monthly publication to estimate the minor product stock level for the current
- Product Supplied is a calculated value computed for specific products by adding domestic production plus net imports (imports less exports), less the net increase in primary stocks. Total Products Supplied is calculated as inputs to refineries, plus estimated refinery gain, plus other hydrocarbon input, plus product imports, less product exports, less the net increase in product stocks.
- The United States encompasses, for the purpose of this report, the 50 states and the District of Columbia.
   Data for the Virgin Islands, Puerto Rico, and other U.S. territories are not included in the U.S. totals.
- Unaccounted-for crude oil is a term which appears in U.S. Petroleum Balance table. It reconciles the difference between data (or estimates) about supply and data (or estimates) about use. Its value can be positive or negative since it is a balancing term. As it appears in the monthly publications, it reflects the accuracy of the reported data on crude oil imports, production, stocks, refinery input, losses, exports, and transfers (crude oil burned directly as fuel oil). It reflects the quality of the estimates as well as the accuracy of the reported data. Because the unaccounted-for crude oil figure reflects the accuracy of reported and estimated figures, one would expect the figure to be larger in balances using preliminary or estimated data and smaller in balances using the final data. In fact, the published figures confirm this expectation. In the WPSR, fourweek averages for the previous year are interpolated from final monthly data, so that the unaccounted-for crude oil value for the previous years is considerably smaller than that for the current period.





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